

What is Claimed:

1. A portable fire hydrant, comprising:

a hydrant body;

a hydraulic cylinder coupled to the hydrant body and comprising an actuator; and

a water main engagement mechanism coupled to the hydrant body, the engagement mechanism comprising at least one locking member that cooperates with the actuator to move between a first position to a second position for engaging a water main component.
2. The portable fire hydrant according to claim 1, further comprising a water main sealing mechanism coupled to the hydrant body, the sealing mechanism comprising a seal distensible from an inner or outer surface of the hydrant body.
3. The portable fire hydrant according to claim 2, wherein the water main sealing mechanism is interconnected with the water main engagement mechanism, such that movement of the at least one locking member to the second position is substantially simultaneous with distension of the seal.
4. The portable fire hydrant according to claim 1, further comprising a water main sealing mechanism coupled to the hydrant body, the sealing mechanism comprising a second hydraulic cylinder having a piston and hydraulic fluid disposed therein, a distensible seal in fluid communication with the second hydraulic cylinder, and a plunger that cooperates with the actuator to displace the piston so that the hydraulic fluid is pressurized sufficiently to distend the seal.
5. The portable fire hydrant according to claim 2, wherein the actuator comprises a shaft and a collar affixed to the shaft, and wherein the collar includes a camming surface.
6. The portable fire hydrant according to claim 5, wherein the camming surface comprises a first taper for actuating the water main sealing mechanism and a second taper for actuating the water main engagement mechanism.

7. The portable fire hydrant according to claim 1, wherein the water main engagement mechanism comprises a second hydraulic cylinder having a piston and hydraulic fluid disposed therein, and a plunger including a first end for engaging the actuator and a second end for engaging the piston; and wherein the at least one locking member is in fluid communication with the second hydraulic cylinder such that displacement of the piston will cause the at least one locking member to move from its first position to its second position.

8. The portable fire hydrant according to claim 7, further comprising a water main sealing mechanism including a distensible seal, and a fluid conduit interposed between the distensible seal and the second hydraulic cylinder.

9. The portable fire hydrant according to claim 1, further comprising a hand pump coupled to the hydrant body for pressurizing fluid within the hydraulic cylinder.

10. A portable fire hydrant, comprising:

a hydrant body;

a water main engagement mechanism coupled to the hydrant body, the engagement mechanism including at least one locking member that is capable of moving from a non-engagement position to an engagement position to engage a water main component; and

a water main sealing mechanism coupled to the hydrant body, the sealing mechanism including a distensible seal;

wherein the engagement mechanism is interconnected with the sealing mechanism, so that actuation of one of the engagement mechanism and the sealing mechanism results in actuation of the other of the engagement mechanism and the sealing mechanism.

11. The portable fire hydrant according to claim 10, wherein one of the engagement mechanism and the sealing mechanism includes a hydraulic cylinder, and the engagement and sealing mechanisms are interconnected via a fluid conduit.

12. A portable fire hydrant, comprising:

a hydrant body; and

a bladder seal radially distensible from the hydrant body for creating a water-tight seal between the portable fire hydrant and a water main component.

13. The portable fire hydrant according to claim 12, wherein the bladder seal is inflated with a gaseous medium.
14. The portable fire hydrant according to claim 12, wherein the bladder seal is distended with a liquid medium.
15. The portable fire hydrant according to claim 12, wherein the hydrant body comprises a conduit disposed therein that terminates at the bladder seal for communicating a fluid medium to the seal.
16. The portable fire hydrant according to claim 12, wherein the hydrant body comprises a hydraulic cylinder in fluid communication with the bladder seal and having a piston and hydraulic fluid disposed therein, and wherein the bladder seal is distensible through displacement of the piston.
17. A portable fire hydrant system, comprising:
 - a portable fire hydrant including a hydrant body; and
 - an engagement mechanism for securing the portable fire hydrant to a water main having a hydrant valve therein, the engagement mechanism includes a hydrant connector affixed to the hydrant body that is securable to a water main independently from actuation of the hydrant valve.
18. The system according to claim 17, wherein the engagement mechanism further includes a pipe connector that is matable with the hydrant connector and that is capable of being affixed to a water main stand pipe.
19. The system according to claim 18, wherein the hydrant connector comprises a shaft disposed inside the hydrant body; and at least one fin radially extending from the shaft, the at least one fin including a threaded portion matable with a threaded portion of the pipe connector.
20. The system according to claim 18, wherein the hydrant connector comprises a plurality of lugs extending from an outer surface of the hydrant body; and wherein the pipe connector

comprises a plurality of multi-directional slots, each of which is configured to accept one of the plurality of lugs.

21. The system according to claim 18, wherein the hydrant connector comprises a plurality of multi-directional slots; and wherein the pipe connector comprises a plurality of pins, each of which being insertable into one of the plurality of multi-directional slots.

22. The system according to claim 21, wherein the plurality of multi-directional slots are disposed in a ring extending from an outer surface of the hydrant body.

23. The system according to claim 18, wherein the hydrant connector comprises a plurality of toggle clamps extending from an outer surface of the hydrant body, each of the toggle clamps including a latch; and wherein the pipe connector comprises a groove configured to accept the latches.

24. The system according to claim 18, wherein the hydrant connector comprises a spring-loaded hinge having a ball extending therefrom; and wherein the pipe connector comprises a groove configured to accept the ball.

25. The system according to claim 18, wherein the hydrant connector comprises a first lug extending from an outer surface of the hydrant body; and wherein the pipe connector comprises a second lug that is matable with the first lug.

26. The system according to claim 18, further comprising at least one seal disposed between the hydrant connector and the pipe connector.

27. A portable fire hydrant system, comprising:

a water main pipe disposed underground and configured for receiving a portable fire hydrant;

an access to the water main pipe from above ground; and

an electronic signaling device proximate the access for identifying the location of the access.

28. The system according to claim 27, wherein the electronic signaling device includes a radio frequency transmitter.
29. The system according to claim 27, wherein the electronic signaling device includes a global positioning satellite device.
30. The system according to claim 27, wherein the electronic signaling device is affixed to a cover disposed over the access.
31. The system according to claim 27, further comprising a portable fire hydrant according to claim 1.
32. The system according to claim 27, further comprising a portable fire hydrant according to claim 10.
33. The system according to claim 27, further comprising a portable fire hydrant according to claim 12.
34. A portable fire hydrant system, comprising:
- a water main pipe disposed underground and configured for receiving a portable fire hydrant;
 - an access to the water main pipe from above ground; and
 - a cover spanning the access, the cover including a locking mechanism that can be electronically or magnetically deactivated.
35. The system according to claim 34, wherein the locking mechanism is deactivated using an electronic keypad disposed on the cover.
36. The system according to claim 34, wherein the locking mechanism includes a plurality of pins that move from an engagement position to a non-engagement position when exposed to a magnetic field.

37. The system according to claim 34, further comprising a portable fire hydrant according to claim 1.

38. The system according to claim 34, further comprising a portable fire hydrant according to claim 10.

39. The system according to claim 34, further comprising a portable fire hydrant according to claim 12.

40. A portable fire hydrant system, comprising:

a water main pipe disposed underground and configured for receiving a portable fire hydrant;

a lateral valve and shoe coupling disposed between the water main pipe and a portable fire hydrant connective pipe.